

[illegible]

Page 1

Accept

**Setup Start**

Stop

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Customer:

Run Start

Process Plan:

Date: 10-6-09 Tooling:

Date:

QC:

Date: _____ **SPC (Y/N):** _____

Date:

Stop

Operation Description

Set Up/ Run Hours

Tool ID

Tool #**Plan
Code**

Accept Qty

Reject
QtyReject
Number

**Insp.
Stamp**

Draw Nbr

Revision Nbr

D3414

Rev C

0.00

0.00

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg D3414-1

Dwg Rev:

Prog Rev: _____

2-Deburr if necessary

110

QC2- Inspect parts off machine FAI/FAIB

0.00

██████████

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59667

Wednesday, June 09, 2010 12:33:13 PM

Page 2

Item ID: D3414-041

Accept

Revision ID:

Item Name: Lug Assembly

Start Date: 6/9/2010 Start Qty: 12.00

Required Date: 6/17/2010 Req'd Qty: 12.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

130

0.00



Brake NC

Memo

0.00

Brake NC

1-Deburr

2-Form using DT8254 as per Dwg D3414

140

0.00



Large Fab

Memo

0.00

Large Fab

1- Weld using location Jig DT8484 as per Dwg D3414
A/R S.S. welding rod Batch: M101244

SB 6/16/16

SB 6/17/17

(H2)

12

EZ 10-6-20

(412)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Wednesday, June 09, 2010 12:33:13 PM

Page 3

Accept

Setup Start

Stop

Cust Item ID:

Customer:

Reference:

Run Start

Stop

**Insp.
Stamp**

0.00

0.00

Quality Control

0.00

0.00

Quality Control

0.00

Powdercoat

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

0.00

12 BR 10-6-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59667

Wednesday, June 09, 2010 12:33:13 PM



Page 4

Item ID: D3414-041

Accept



Setup Start



Revision ID:

Item Name: Lug Assembly

Stop



Start Date: 6/9/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 6/17/2010 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp Stamp
180 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				10-6-23	12x		
190 Packaging Packaging	Identify as per dwg & Stock Location: 473 Memo	0.00 0.00				10-6-23	12x		
200 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							 CL 10/6/24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, June 09, 2010 12:33:18 PM

Page 1

Work Order ID: 59667

Parent Item: D3414-041

Parent Item Name: Lug Assembly





Comments: IPP A 05.09.13 New issue KJ/JLM

Start Date: 6/9/2010

Required Date: 6/17/2010

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S12GA  304/316 0.100" Sheet		Purchased	No			100	sf	192.0000	155  10-06-22	18.24	2.5 810-6-16		
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				MAT19				192					
				112611				32		112611		(12)	
				113062				128					
				113077				32					
D3414-3  Lug		Manufactured	No			140	Each	36.0000	1 	12		10-6-22	
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				WA				36					
				52652				17		12			
				53355				19					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	59467
Description: Lug Bracket		Part Number:	D3414-1
Inspection Dwg: D3414	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.313	+0.006/-0.001	.313	✓			
1.19	+/-0.030	1.185	✓			
1.00	+/-0.030	1.009	✓			
3.38	+/-0.030	3.379	✓			
5.350	+/-0.010	5.353	✓			
6.23	+/-0.030	6.225	✓			
2.500	+/-0.010	2.503	✓			
0.37	+/-0.030	.369	✓			
0.100	+/-0.010	.099	✓			

Measured by: B	Audited by: S	Prototype Approval:	N/A
Date: 10-6-16	Date: 10/06/16	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue P/O D3414-041	KJ/DD	
B	09.05.27	Dimensions updated per Dwg Rev B	KJ	
C	09.10.16	Dwg Rev updated to Rev C	KJ	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

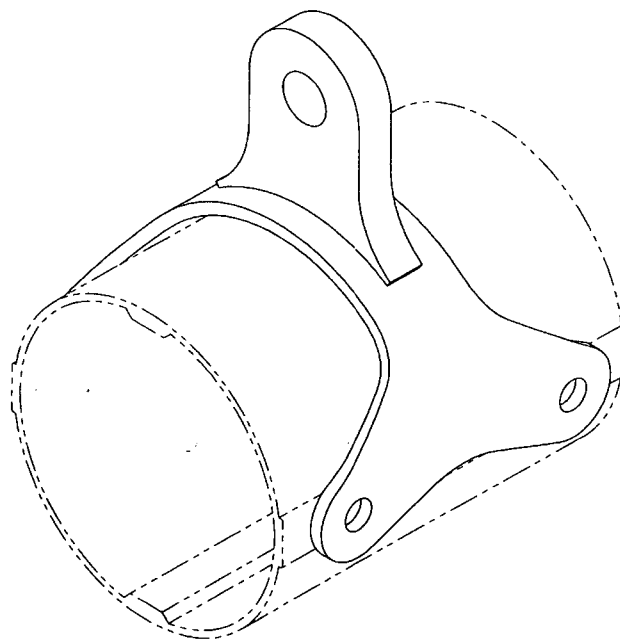
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM No.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D3414-041	LUG ASSEMBLY
2	1	D3414-1	LUG BRACKET
3	1	D3414-3	LUG



D3414-041 LUG ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3414-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.52 lbs

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 59667

BS10-6-09

RELEASED
8/16/09

C	BREAK SHARP EDGES FOR -3 NOW 0.030-0.080 WAS 0.010-0.030 (ZN A7-3)	CP	09.06.17
B	DRAWING REDRAWN IN SOLIDWORKS WITH CURRENT STANDARDS AND TRANSFERRED TO "B" SIZE BORDER. FLAT PATTERN FOR -1 INCREASED IN LENGTH TO PREVENT FOULING AT INSTL (SEE PAR198). FLAT SPOTS REMOVED FROM -1 (PART NOW "U" SHAPED) FOR EASE OF MANUFACTURE. B7-3 ADDED TOLERANCE TO 3.230 DIM. C2-3 1.12 DIM WAS 1.20.	AJS	08.09.23
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CP		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	D3414	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	LUG ASSEMBLY	NTS
DATE	09.06.17	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

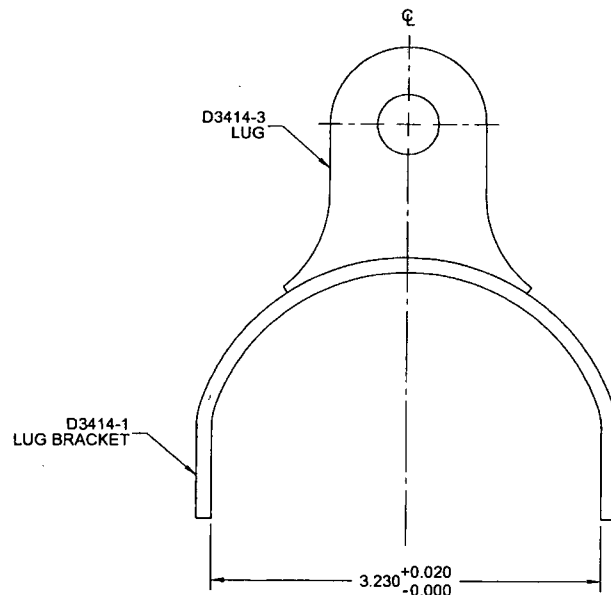
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

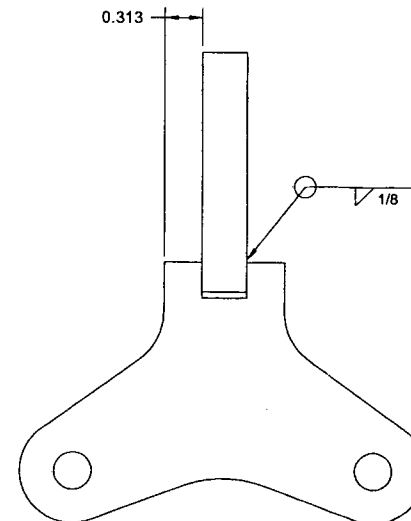
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3414-041 LUG ASSEMBLY



w/o 59667

RELEASED

DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CP		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3414	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		LUG ASSEMBLY	NTS
DATE	09.06.17	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

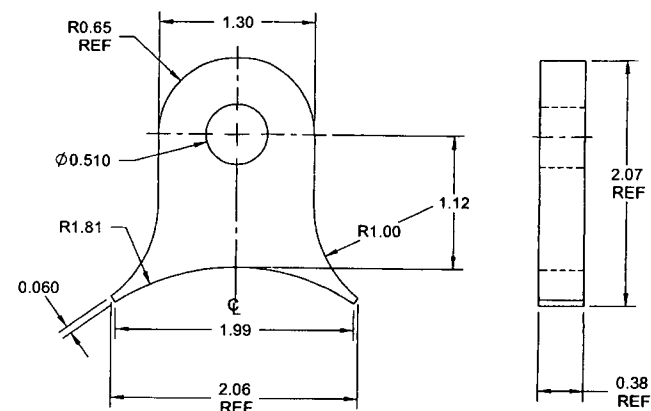
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3414-3 LUG

1) MATERIAL: -1: AISI 304/316 STAINLESS STEEL SHEET, 12 GAUGE (0.100 THICK)
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S12GA

-3: AISI 304/316 STAINLESS STEEL PLATE
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: -1: 0.010 TO 0.020 MAX

-3: 0.030 TO 0.060 MAX

6) IDENTIFICATION: N/A

7) WEIGHT: N/A

DESIGN	QP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3414 REV. 1 SHEET 3 OF 3 SCALE NT COPYRIGHT © 2005 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.</small>
DRAWN	CP	
CHECKED	CP	
MFG. APPR.	CP	
APPROVED	CP	
DE APPR.	CP	
DATE	09.06.17	LUG ASSEMBLY

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries